

## Case 406 : Narrative

Case Vehicle (A): 2002 Pontiac	Vehicle (B): 2002 Ford
Type: Sunfire SE, 2-door coupe	Type: Windstar LX, minivan
Driver: 26-year-old female	Driver: 28-year-old female
CDC: 12-FZEW-2	CDC: 99-0000-0

### SITUATION

[1](#) [2](#) [3](#) [4](#) It was daylight, the skies were clear, and the road surface was dry and free of defects as case vehicle (A) was traveling north at an EDR-documented (Event Data Recorder) speed of 49 mph (79 kph) in the northbound lane of a three-lane asphalt north-south roadway with a posted speed limit of 45 mph (72 kph). [5](#) [6](#) Vehicle (B) was traveling south in the southbound lane of the same roadway and was behind vehicle (X). As all three vehicles approached a traffic-signal-controlled four-leg intersection with a three-lane east-west road, vehicle (B) and vehicle (X) moved into the left-turn lane. The driver of vehicle (X) then initiated and completed a left turn across the northbound lane to travel east on the east-west road. [7](#) The driver of vehicle (B) followed vehicle (X) into the intersection to initiate a left turn just before case vehicle (A) entered the intersection to continue traveling north, and [8](#) the front of case vehicle (A) struck the right side of vehicle (B) at the fender. Both vehicles were towed from the scene due to damage.

The police accident report indicates B-level injuries for the driver of case vehicle (A) and the driver of vehicle (B), and C-level injuries for the two passengers of vehicle (B). All occupants were transported to a local hospital where they were treated and released.

### GENERAL VEHICLE DAMAGE AND ESTIMATED CRASH SEVERITIES

[9](#) [10](#) Direct damage to case vehicle (A) was primarily to the right front. Direct damage began at the right-front bumper corner and extended 96-cm to the left, resulting in 61% vehicle overlap. [11](#) The maximum rearward crush at bumper level was 42 cm and it occurred at the right-front bumper corner.

Vehicle (B) was not available for inspection.

Using the missing-vehicle algorithm of the WinSMASH crash-reconstruction program and a crush profile [11](#) [12](#) measured for case vehicle (A), the following impact severities were estimated:

		Calculated Velocity Change - kph (mph)		
Vehicle	Variable	Total	Longitudinal	Latitudinal
Case Vehicle (A)	delta V	49 (31)	-46 (-29)	17 (11)
Vehicle (B)	delta V	33 (20)	-21 (-13)	-25 (-16)

Case vehicle (A) was equipped with an Event Data Recorder (EDR) that recorded a previous non-deployment event and a deployment event for this crash. The deployment-event data indicate a

maximum longitudinal velocity change of -28 mph (-45 kph) and that one-second prior to the deployment event the brakes were activated, the throttle was at 0%, and the speed was 39 mph (63 kph).

## DESCRIPTION OF DAMAGE TO CASE VEHICLE (A)

### Exterior

[13](#) Primary damage to case vehicle (A) was to the front of the vehicle which was crushed rearward on the right side. [14](#) The front of the hood was crushed down into the grille and radiator, both headlight assemblies were broken, and the bumper cover was cracked and separated from the bumper support and [15](#) was attached only at the right fender. The hood latch was damaged and jammed, [16 17](#) the hood hinges were damaged but not separated, and the right-rear edge of the hood was elevated but it did not contact the windshield. [18](#) There were diagonal cracks throughout the windshield due to cowl deformation.

[19 20](#) On the right side of the vehicle, the fender was buckled and crushed rearward into the passenger door. [20 21](#) The right-front wheel was rotated out approximately 60 degrees, the wheel cover was damaged, the tire was flat, and the right-side wheelbase was decreased by 21 cm. [22 23](#) The right side of the roof and roof siderail were buckled up, the back of the sunroof was partially open, the upper and lower sections of the right A-pillar were damaged, and the front section of the passenger door was damaged from contact by the fender. The exterior panel of the right-side door was buckled in below the window frame and behind the door handle, the door handle was jammed up, the door was jammed shut, the door glazing was disintegrated, and the right-side mirror was missing from the mirror assembly. [24](#) The roof was buckled above the right-rear window, which was intact, the B-pillar was displaced slightly to the rear, there were scrape marks on the right quarter panel, the rear trim strip was displaced out to the right, and [25](#) the right-rear wheel cover was damaged, but the right-rear tire was intact.

[24 26](#) There was no damage to the rear of case vehicle (A).

[27](#) On the left side, the left-front wheel cover was damaged and the tire was flat, but there was no significant change in the wheelbase. [28 29](#) There was no damage to the left fender [30](#) or to the left A- and B-pillars, and the driver door was slightly displaced. The left-side glazing was intact and there was no damage to the quarter panel or [31](#) to the left-rear tire, but the left-rear wheel cover was damaged.

### Interior

[32 33 34](#) This vehicle was equipped with steering-wheel and dash-mounted frontal-impact airbags and both deployed during the frontal impact with vehicle (B). In the driver area, [35](#) there was no damage to the steering-wheel airbag or to the airbag module cover, but there were small areas of grease in the center area of the airbag fabric. [36 37](#) There was no damage to the steering-wheel rim or spokes and there was no rotation of the steering column. [38](#) There were diagonal cracks throughout the windshield and the lower portion of the windshield was sagging down on top of the instrument panel, but the plastic interlayer was not torn. [39 40](#) There was no damage to the roof interior, to the sunvisor, to the windshield header, to the left A-pillar, or to the instrument panel. [41 42](#) There was a large scuffmark on the knee bolster panel directly under the steering-wheel. [43 44](#) There was no damage to the seatback, to the seat cushion, to the seat adjuster, to the driver door, or to the B-pillar. [45](#) There was no damage to the floor, to the kickpanel, to the toe pan, or to the foot controls.

In the center-front area, there was no damage to the roof interior but the windshield header was

damaged. 46 The lower portion of the windshield was sagging down on the instrument panel and 47 the rearview mirror was displaced, but the windshield plastic interlayer was not torn. 46 48 The upper-left section of the vertical console was displaced and cracked, the radio was broken and displaced from its support panel, a temperature control knob was missing, and 48 49 there was a scuffmark on the bottom section of the vertical console. 50 There was no damage to the cup holder, to the storage area, to the transmission selector lever, or to the center console.

51 In the right-front seating area, there was no damage to the dash-mounted airbag or to the module cover but there was a small bloodstain on the right side above the center seam. 52 The windshield header was damaged, there were diagonal cracks throughout the windshield, and there was a dense circular pattern of cracks where the deploying dash-mounted airbag and/or module cover contacted the windshield. 53 54 The roof siderail was buckled above the right-front seat. 55 There was no damage to the sunvisor, to the upper vent outlet, or to the upper instrument panel, but the A-pillar was displaced rearward, 56 the glove box was displaced and jammed, and the floor mat, the toepan, and the door sill were buckled to the left. 57 58 There was no damage to the right B-pillar, to the passenger-seat cushion, to the seatback, to the seat head restraint, or to the manual seat adjuster. 59 A section of the door hardware panel was missing and the door handle was jammed.

60 61 In the left-rear seating area, there was no damage to the rear interior panel, to the left-rear seat, or to the C-pillar. The rear window headliner was slightly buckled over the left-rear seat but the window was intact.

62 63 There was no damage to the interior in the center-rear and right-rear seating areas. The back of the roof headliner was displaced down on the right side but the rear window was intact.

64 The following intrusions were noted and measured:

Location	Component	Distance (cm)	Direction
right front	A-pillar	10	to rear
	instrument panel	10	to rear
	toepan	7	to rear
	door sill	6	to left

OCCUPANT KINEMATICS AND INJURIES

65 The 168-cm, 57-kg (5-ft 6-in, 125-lb) 26-year-old female driver was using the three-point-belt and the steering-wheel airbag deployed. 66 67 There was no evidence of belt use on the continuous loop but 68 webbing load marks on the D-ring and EDR data confirm belt use by the driver. On impact, the driver moved forward relative to the interior of the vehicle, into the three-point belt and the steering-wheel airbag. She sustained a contusion to the left breast, probably from loading by the shoulder belt.

The following table and 69 attached drawing summarize the injuries sustained by the restrained driver of case vehicle (A).

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Occupant: Driver	Age: 26 years	Gender: Female		
Restraints: 3-point belt; steering-wheel airbag	Stature: 168 cm (5 ft, 6 in)	Mass: 57 kg (125 lb)		
Injury Description	A.I.S.	Injury Source		
—	—	Definite	Probable	Possible
Contusion, left breast	1	—	Shoulder belt	—
Maximum A.I.S. Level	1	—	—	—
Injury Severity Score	1	—	—	—

CASE NO.: 406

CASE VEHICLE: 2002 Pontiac

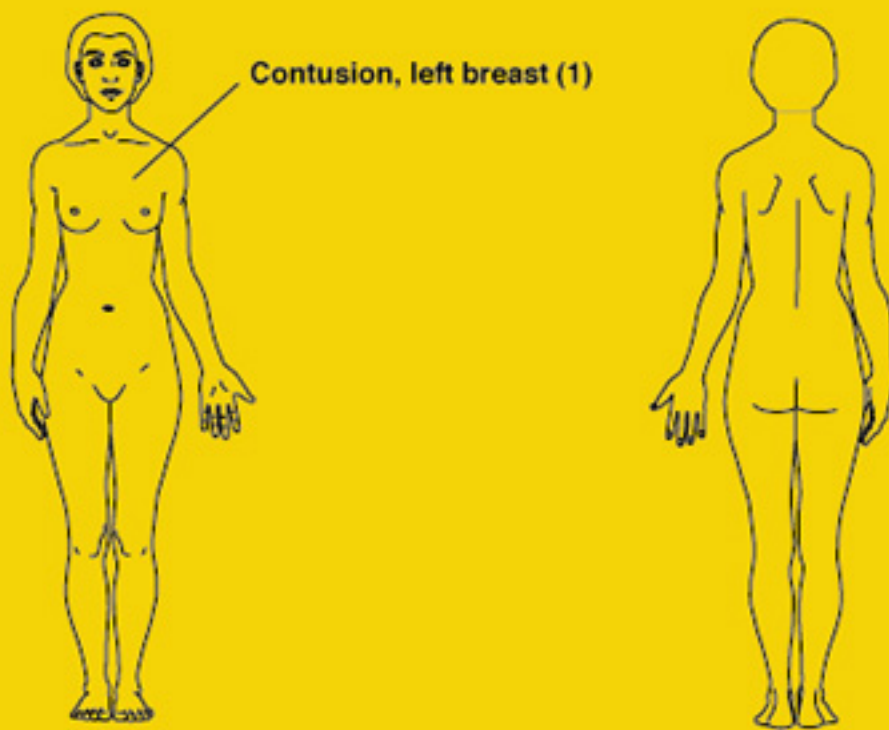
TYPE: Sunfire SE, 2-door coupe

OCCUPANT: (Driver) 26-year-old female

STATURE: 168 cm (5 ft, 6 in)    MASS: 57 kg (125 lb)

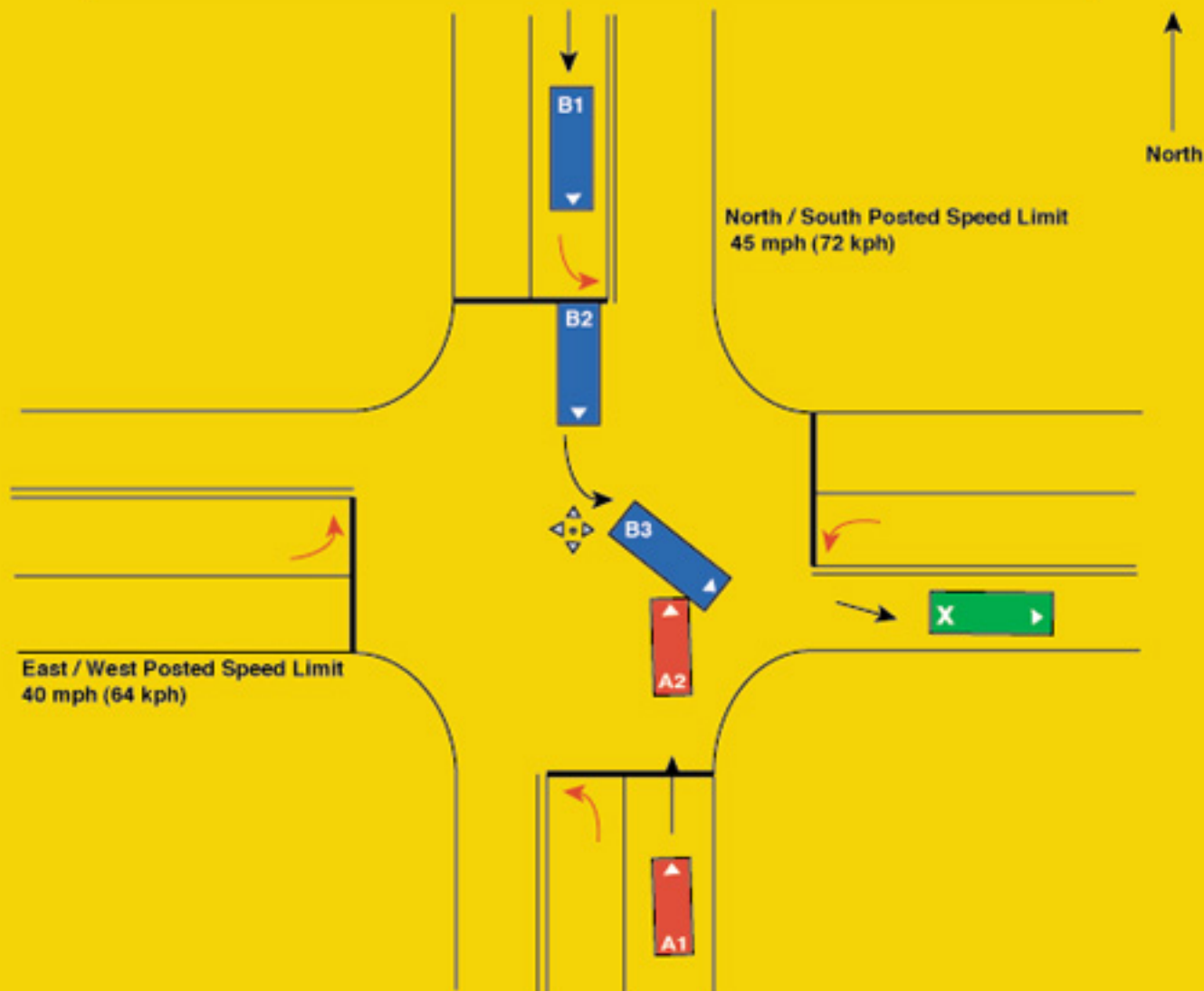
RESTRAINTS: 3-point belt; steering-wheel airbag

SEVERITY: MAIS - 1    ISS - 1



Case No.: 406  
Case Vehicle: 2002 Pontiac  
Type: Sunfire SE, 2-door coupe  
Driver: 26-year-old female  
Vehicle (B): 2002 Ford Windstar LX, Minivan

Light Conditions: Daylight  
Weather: Clear  
Road Surface: Dry  
Road Construction: Asphalt



# Vehicle Report

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## General Conditions

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Variable Number and Name	Code Value	Code Description	Other Options
V206 — Urban/Rural Area	1	Urban	<a href="#">more</a>
V207 — Limited Access Highway	0	No	<a href="#">more</a>
V208 — Road Total Lanes	3	3 lanes	<a href="#">more</a>
V209 — Intersecting Road Total Lanes	3	3 lanes	<a href="#">more</a>
V210 — Road Surface Type	1	Asphalt	<a href="#">more</a>
V211 — Road Defects	0	No	<a href="#">more</a>
V212 — Construction Zone	0	No	<a href="#">more</a>
V213 — Road Alignment Vertical Plane	1	Level	<a href="#">more</a>
V214 — Road Alignment Horizontal Plane	1	Straight	<a href="#">more</a>
V215 — Surface Covering	10	Dry	<a href="#">more</a>
V216 — Visibility Limitation	0	None	<a href="#">more</a>
V217 — Visibility Obstruction	0	None	<a href="#">more</a>
V218 — Speed Limit	4	71-79 km/h .. 45 mph	<a href="#">more</a>
V219 — Precipitation Type	0	None	<a href="#">more</a>
V220 — Precipitation Rate	8	Not applicable	<a href="#">more</a>
V221 — Temperature	7	26 to 35 C .. 78 to 95 F	<a href="#">more</a>

V222 — Crosswind	9	Unknown	<a href="#">more</a>
V223 — Light Conditions	1	Daylight	<a href="#">more</a>
V224 — Mechanical Malfunction Mention	0	No	<a href="#">more</a>
V225 — Case Vehicle and Object	0	No	<a href="#">more</a>
V226 — Case Vehicle Rollover	0	No	<a href="#">more</a>
V227 — Case Vehicle Ran Off Roadway	0	No	<a href="#">more</a>
V228 — Moving Case Vehicle/Contacted Moving Vehicle	1	Yes	<a href="#">more</a>
V229 — Case Vehicle/Contacted Stopped Vehicle	0	No	<a href="#">more</a>
V230 — Stopped Case Vehicle/Contactd Vehicle	0	No	<a href="#">more</a>
V231 — Total Vehicles Hit By Case Vehicle	1	1 vehicle	<a href="#">more</a>
V232 — Any Fire in Crash	0	No	<a href="#">more</a>
V233 — Max Police Severity-PAR	2	B - Non-Incapacitating Injury	<a href="#">more</a>
V234 — Driver Alcohol Involvement	0	Had not been drinking	<a href="#">more</a>
V235 — Driver Alcohol BAC	80	Not tested	<a href="#">more</a>
V236 — Driver Impairment Mention	0	No	<a href="#">more</a>
V237 — Driven/Towed From Scene	2	Towed Due to Damage	<a href="#">more</a>

## Other Vehicle

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Variable Number and Name	Code Value	Code Description	Other Options
V301 — Other Vehicle VIN	2FMZA51492BB	—	—
V302 — Other Vehicle Manufacturer/Body Code	12111	—	—
V303 — Other Vehicle Manufacturer	121	Ford	<a href="#">more</a>
V304 — Other Vehicle Body Code	11	Passenger van; panel or cargo van	<a href="#">more</a>
V305 — Other Vehicle Make/Model	3133	Windstar	<a href="#">more</a>
V306 — Other Vehicle Model Year	2002	—	—
V307 — Other Vehicle Mass	001765 kg	—	—
V308 — Other Vehicle Number	0	No separate report	<a href="#">more</a>
V309 — Other Vehicle Number of Occupants	03	—	—
V310 — Other Vehicle Traveling Speed	999	Unknown	<a href="#">more</a>

V311 — Highest Police Injury Severity	2	B - Non-Incapacitating Injury	<a href="#">more</a>
V312 — Other Vehicle Type	11	Small van (e.g. Econoline)	<a href="#">more</a>
V313 — Other Vehicle Wheelbase (cm)	307 cm	—	—
V314 — Average Track Width	162 cm	—	—
V315 — Overall Length	511 cm	—	—
V316 — Overall Width (OAW)	192 cm	—	—
V317 — Front Overhang (FOH)	101 cm	—	—
V318 — Rear Overhang (ROH)	103 cm	—	—
V319 — Undeformed End Width (UEW)	999	Unknown	<a href="#">more</a>
V320 — Engine Displacement	3.8 l	—	—
V321 — Engine: Number of Cylinders	06	—	—
V322 — Direct Damage Length (DDL)	999	Unknown	<a href="#">more</a>
V323 — Front-End Overlap % (FEO)	99	Missing or Not applicable	<a href="#">more</a>
V324 — Vehicle Overlap % (VOL)	99	Missing or Not applicable	<a href="#">more</a>

## Case Vehicle General



[Click for case vehicle figure](#)

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Variable Number and Name	Code Value	Code Description	Other Options
V401 — VIN	1G2JB12F1274	—	—
V402 — Manufacturer/Body Code	11527	—	—
V403 — Vehicle Manufacturer	115	Pontiac	<a href="#">more</a>
V404 — Vehicle Body Code	27	—	—
V405 — Make/Model Code	0352	—	—
V406 — Model Year	2002	—	—
V407 — Vehicle Mass	001182 kg	—	—
V408 — Odometer Reading	027622 miles	—	—
V409 — Number of Occupants	01	—	—
V410 — Traveling Speed	079 kph	—	—
V411 — Body Type	12	2-door sedan or coupe (any upper B-pillar)	<a href="#">more</a>
V412 — Stolen Vehicle	8	Not currently collected	<a href="#">more</a>
V413 — Body Structure	2	Unitized	<a href="#">more</a>
V414 — Transmission Type	1	Automatic	<a href="#">more</a>

V415 — Transmission Lever Location	2	Console	<a href="#">more</a>
V416 — Steering	1	Power	<a href="#">more</a>
V417 — Brakes	1	Power	<a href="#">more</a>
V418 — Brake Type	2	Disc - front wheels	<a href="#">more</a>
V419 — Brake Anti-lock Device	2	Four-wheel	<a href="#">more</a>
V420 — Air Conditioning in Vehicle	8	Not currently collected	<a href="#">more</a>
V421 — Drive Type	2	Front wheel	<a href="#">more</a>
V422 — Dual Rear Wheels	0	No	<a href="#">more</a>
V423 — Original Restraint System Type	3	Airbag	<a href="#">more</a>
V424 — Equipped With Roll Bar	0	No	<a href="#">more</a>
V425 — Roof Type	4	Sun roof closed	<a href="#">more</a>
V426 — Wheelbase	264 cm	—	—
V427 — Anti-lacerative Glass	0	None	<a href="#">more</a>
V428 — Average Track Width	145 cm	—	—
V429 — Overall Length	461 cm	—	—
V430 — Overall Width (OAW)	174 cm	—	—
V431 — Front Overhang	100 cm	—	—
V432 — Rear Overhang	098 cm	—	—
V433 — Undeformed End Width (UEW)	155 cm	—	—
V434 — Engine Displacement	2.2 l	—	—
V435 — Engine: Number of Cylinders	04	—	—
V436 — Direct Damage Length (DDL)	096 cm	—	—
V437 — Front End Overlap % (FEO)	62	—	—
V438 — Vehicle Overlap % (VOL)	61	—	—

## Case Vehicle Damage Description

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Variable Number and Name	Code Value	Code Description	Other Options
V501 — Maximum Crush - Front	042 cm	—	—
V502 — Maximum Crush - Right Side	000 cm	No crush (or less than 1 cm.)	<a href="#">more</a>
V503 — Maximum Crush - Rear	000 cm	No crush (or less than 1 cm.)	<a href="#">more</a>
V504 — Maximum Crush - Left Side	000 cm	No crush (or less than 1 cm.)	<a href="#">more</a>

V505 — Maximum Crush - Roof	000 cm	No crush (or less than 1 cm.)	<a href="#">more</a>
V506 — Maximum Crush - Other	000 cm	No crush (or less than 1 cm.)	<a href="#">more</a>
V507 — Are Events In Chronological Order	1	Yes	<a href="#">more</a>
V508 — Event 1 Impact Location	1	On Roadway	<a href="#">more</a>
V509 — Event 1 Impact Configuration	13	FRONT of case veh - SIDE of contacted Vehicle	<a href="#">more</a>
V510 — Event 1 Object/Vehicle Contacted	11	Small van (e.g. Econoline)	<a href="#">more</a>
V511 — Event 2 Impact Location	8	No 2nd event	<a href="#">more</a>
V512 — Event 2 Impact Configuration	88	No 2nd event	<a href="#">more</a>
V513 — Event 2 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V514 — Event 3 Impact Location	8	No 3rd event	<a href="#">more</a>
V515 — Event 3 Impact Configuration	88	No 3rd event	<a href="#">more</a>
V516 — Event 3 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V517 — Event 4 Impact Location	8	No 4th event	<a href="#">more</a>
V518 — Event 4 Impact Configuration	88	No 4th event	<a href="#">more</a>
V519 — Event 4 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V520 — Event 5 Impact Location	8	No 5th event	<a href="#">more</a>
V521 — Event 5 Impact Configuration	88	No 5th event	<a href="#">more</a>
V522 — Event 5 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V523 — Event 6 Impact Location	8	No 6th event	<a href="#">more</a>
V524 — Event 6 Impact Configuration	88	No 6th event	<a href="#">more</a>
V525 — Event 6 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V526 — Event 7 Impact On Road	8	No 7th event	<a href="#">more</a>
V527 — Event 7 Impact Configuration	88	No 7th event	<a href="#">more</a>
V528 — Event 7 Object/Vehicle Contacted	00	No object/vehicle contacted	<a href="#">more</a>
V529 — Primary CDC Case Vehicle -event Number	1	Event 1	<a href="#">more</a>
V530 — Primary CDC Case Vehicle	063		

- impact speed		—	—
V531 — Primary CDC Case Vehicle - Estimated By	7	Other	<a href="#">more</a>
V532 — Primary CDC Case Vehicle -crush	042	—	—
V533 — Primary CDC Case Vehicle -clock #1	12	12 o'clock	<a href="#">more</a>
V534 — Primary CDC Case Vehicle letter 1 #1	06	F - Front	<a href="#">more</a>
V535 — Primary CDC Case Vehicle letter 2 #1	26	Z - Side or end (B + P or R + C)	<a href="#">more</a>
V536 — Primary CDC Case Vehicle letter 3 #1	05	E - Everything below belt line	<a href="#">more</a>
V537 — Primary CDC Case Vehicle letter 4 #1	23	W - Wide impact area	<a href="#">more</a>
V538 — Primary CDC Case Vehicle Extent #1	02	Extent 2	<a href="#">more</a>
V539 — Primary CDC Case Vehicle -CDC #1	12FZEW2	—	—
V541 — Primary CDC Case Vehicle letter 1 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V542 — Primary CDC Case Vehicle letter 2 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V543 — Primary CDC Case Vehicle letter 3 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V544 — Primary CDC Case Vehicle letter 4 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V545 — Primary CDC Case Vehicle Extent #2	00	Missing Data/Not applicable	<a href="#">more</a>
V546 — Primary CDC Case Vehicle -CDC #2	9800000	—	—
V547 — Primary CDC Contacted Vehicle - Impact Speed	999	Unknown	<a href="#">more</a>
V548 — Primary CDC Contacted Vehicle - Estimated By	1	Investigator	<a href="#">more</a>
V549 — Primary CDC Contacted Vehicle -crush	999	Unknown	<a href="#">more</a>
V550 — Primary CDC Contacted Vehicle -clock #1	99	Unknown or no damage	<a href="#">more</a>
V551 — Primary CDC Contacted Vehicle letter 1 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V552 — Primary CDC Contacted Vehicle letter 2 #1	00	Missing Data/Not applicable	<a href="#">more</a>

V553 — Primary CDC Contacted Vehicle letter 3 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V554 — Primary CDC Contacted Vehicle letter 4 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V555 — Primary CDC Contacted Vehicle Extent #1	00	Missing Data/Not applicable	<a href="#">more</a>
V556 — Primary CDC Contacted Vehicle -CDC #1	9900000	—	—
V558 — Primary CDC Contacted Vehicle letter 1 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V559 — Primary CDC Contacted Vehicle letter 2 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V560 — Primary CDC Contacted Vehicle letter 3 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V561 — Primary CDC Contacted Vehicle letter 4 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V562 — Primary CDC Contacted Vehicle Extent #2	00	Missing Data/Not applicable	<a href="#">more</a>
V563 — Primary CDC Contacted Vehicle -CDC #2	9800000	—	—
V564 — Secondary CDC Case Vehicle - Event No	8	Not applicable	<a href="#">more</a>
V565 — Secondary CDC Case Vehicle - Impact Speed	998	Not Applicable	<a href="#">more</a>
V566 — Secondary CDC Case Vehicle - Estimated By	8	Not applicable (no vehicle/no impact)	<a href="#">more</a>
V567 — Secondary CDC Case Vehicle -crush	998	Not Applicable	<a href="#">more</a>
V568 — Secondary CDC Case Vehicle -clock #1	98	Not Applicable	<a href="#">more</a>
V569 — Secondary CDC Case Vehicle letter 1 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V570 — Secondary CDC Case Vehicle letter 2 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V571 — Secondary CDC Case Vehicle letter 3 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V572 — Secondary CDC Case Vehicle letter 4 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V573 — Secondary CDC Case Vehicle Extent #1	00	Missing Data/Not applicable	<a href="#">more</a>
V574 — Secondary CDC Case Vehicle -CDC #1	9800000	—	—
V576 — Secondary CDC Case	00	Missing Data/Not applicable	<a href="#">more</a>

Vehicle letter 1 #2			
V577 — Secondary CDC Case Vehicle letter 2 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V578 — Secondary CDC Case Vehicle letter 3 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V579 — Secondary CDC Case Vehicle letter 4 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V580 — Secondary CDC Case Vehicle Extent #2	00	Missing Data/Not applicable	<a href="#">more</a>
V581 — Secondary CDC Case Vehicle -CDC #2	9800000	—	—
V582 — Secondary CDC Contacted Vehicle - Impact Speed	998	Not Applicable	<a href="#">more</a>
V583 — Secondary CDC Contacted Vehicle - Estimated By	8	Not applicable (no vehicle/no impact)	<a href="#">more</a>
V584 — Secondary CDC Contacted Vehicle -crush	998	Not Applicable	<a href="#">more</a>
V585 — Secondary CDC Contacted Vehicle -clock #1	98	Not Applicable	<a href="#">more</a>
V586 — Secondary CDC Contacted Vehicle letter 1 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V587 — Secondary CDC Contacted Vehicle letter 2 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V588 — Secondary CDC Contacted Vehicle letter 3 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V589 — Secondary CDC Contacted Vehicle letter 4 #1	00	Missing Data/Not applicable	<a href="#">more</a>
V590 — Secondary CDC Contacted Vehicle Extent #1	00	Missing Data/Not applicable	<a href="#">more</a>
V591 — Secondary CDC Contacted Vehicle -CDC #1	9800000	—	—
V593 — Secondary CDC Contacted Vehicle letter 1 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V594 — Secondary CDC Contacted Vehicle letter 2 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V595 — Secondary CDC Contacted Vehicle letter 3 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V596 — Secondary CDC Contacted Vehicle letter 4 #2	00	Missing Data/Not applicable	<a href="#">more</a>
V597 — Secondary CDC Contacted Vehicle Extent #2	00	Missing Data/Not applicable	<a href="#">more</a>
V598 — Secondary CDC Contacted Vehicle -CDC #2	9800000	—	—

## Crash Severity

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Variable Number and Name	Code Value	Code Description	Other Options
V601 — Case Vehicle Primary Impact Number	1	—	—
V602 — Primary Impact Total Delta-V	049 kph	—	—
V603 — Primary Case Vehicle Reconstructed Longitudinal Delta-V	-046 kph	—	—
V604 — Primary Case Vehicle Reconstructed Lateral Delta-V	0017 kph	—	—
V605 — Primary Case Vehicle Reconstructed Crush Energy	0063 kJ	—	—
V606 — Primary Impact Case Vehicle - reconstruction	22	Reconstructed, moderate confidence level	<a href="#">more</a>
V607 — Primary Case Vehicle Reconstruction Mode	2	CDC & detailed damage	<a href="#">more</a>
V608 — Primary Contacted Vehicle Reconstructed	033 kph	—	—

Total Delta-V			
V609 — Primary Contacted Vehicle Reconstructed Longitudinal Delta-V	-021 kph	—	—
V610 — Primary Contacted Vehicle Reconstructed Lateral Delta- V	-025 kph	—	—
V611 — Primary Contacted Vehicle Reconstructed Crush Energy	0204 kJ	—	—
V612 — Case Vehicle Secondary Impact Number	8	—	—
V613 — Secondary Case Vehicle Reconstructed Total Delta-V	888	N/A	<a href="#">more</a>
V614 — Secondary Case Vehicle Reconstructed Longitudinal Delta-V	8888	—	—
V615 — Secondary Case Vehicle Reconstructed Lateral Delta- V	8888	—	—
V616 — Secondary Case Vehicle Reconstructed Crush Energy	8888	—	—

V617 — Secondary Case Vehicle Reconstruction Note	88	—	—
V618 — Secondary Case Vehicle Reconstruction Mode	8	Not applicable	<a href="#">more</a>
V619 — Secondary Contacted Vehicle Reconstructed Total Delta-V	888	N/A	<a href="#">more</a>
V620 — Secondary Contacted Vehicle Reconstructed Longitudinal Delta-V	8888	—	—
V621 — Secondary Contacted Vehicle Reconstructed Lateral Delta- V	8888	—	—
V622 — Secondary Contacted Vehicle Reconstructed Crush Energy	8888	—	—
V623 — Case Vehicle Primary Impact Number	1	—	—
V624 — Primary Case Vehicle Reconstructed Total EBS	049 kph	—	—
V625 — Primary Case	-046 kph		

Vehicle Reconstructed Longitudinal EBS		—	—
V626 — Primary Case Vehicle Reconstructed Lateral EBS	0017 kph	—	—
V627 — Primary Case Vehicle Reconstructed Crush Energy	0063 kJ	—	—
V628 — Primary Case Vehicle Reconstruction Note	22	Reconstructed, moderate confidence level	<a href="#">more</a>
V629 — Primary Case Vehicle Reconstruction Mode	2	CDC & detailed damage	<a href="#">more</a>
V630 — Primary Contacted Vehicle Reconstruction Total EBS	033 kph	—	—
V631 — Primary Contacted Vehicle Reconstruction Longitudinal EBS	-021 kph	—	—
V632 — Primary Contacted Vehicle Reconstruction Lateral EBS	-025 kph	—	—
V633 — Primary Contacted Vehicle Reconstruction	0204 kJ	—	—

Crush Energy			
V634 — Case Vehicle Secondary Impact Number	8	Not applicable	<a href="#">more</a>
V635 — Secondary Case Vehicle Reconstruction Total EBS	888	N/A	<a href="#">more</a>
V636 — Secondary Case Vehicle Reconstruction Longitudinal EBS	8888	—	—
V637 — Secondary Case Vehicle Reconstruction Lateral EBS	8888	—	—
V638 — Secondary Case Vehicle Reconstruction Crush Energy	8888	—	—
V639 — Secondary Case Vehicle Reconstruction Note	88	—	—
V640 — Secondary Case Vehicle Reconstruction Mode	8	Not applicable	<a href="#">more</a>
V641 — Secondary Contacted Vehicle Reconstruction Total EBS	888	N/A	<a href="#">more</a>
V642 — Secondary Contacted Vehicle	8888	—	—

Reconstruction Longitudinal EBS			
V643 — Secondary Contacted Vehicle Reconstruction Lateral EBS	8888	—	—
V644 — Secondary Contacted Vehicle Reconstruction Crush Energy	8888	—	—
V645 — Case Vehicle Reconstructed Impact Number	1	—	—
V646 — Case Vehicle Impact 1 Plane	1	Bumper	<a href="#">more</a>
V647 — Case Vehicle Impact 1 Direct Damage Length [DDL]	096 cm	—	—
V648 — Case Vehicle Impact 1 Max Crush	042 cm	—	—
V649 — Case Vehicle Impact 1 Field-L	104 cm	—	—
V650 — Case Vehicle Impact 1 C1	004 cm	—	—
V651 — Case Vehicle Impact 1 C2	016 cm	—	—
V652 — Case Vehicle Impact 1 C3	026 cm	—	—
V653 — Case	033 cm		

Vehicle Impact 1 C4		—	—
V654 — Case Vehicle Impact 1 C5	038 cm	—	—
V655 — Case Vehicle Impact 1 C6	042 cm	—	—
V656 — Case Vehicle Impact 1 +/- D	0030 cm	—	—
V657 — Case Vehicle Reconstructed Impact Number	2	—	—
V658 — Case Vehicle Impact 2 Plane	8	Not applicable	<a href="#">more</a>
V659 — Case Vehicle Impact 2 Direct Damage Length [DDL]	998	Not applicable	<a href="#">more</a>
V660 — Case Vehicle Impact 2 Max Crush	998	Not applicable	<a href="#">more</a>
V661 — Case Vehicle Impact 2 Field-L	998	Not applicable	<a href="#">more</a>
V662 — Case Vehicle Impact 2 C1	998	Not applicable	<a href="#">more</a>
V663 — Case Vehicle Impact 2 C2	998	Not applicable	<a href="#">more</a>
V664 — Case Vehicle Impact 2 C3	998	Not applicable	<a href="#">more</a>
V665 — Case Vehicle Impact 2 C4	998	Not applicable	<a href="#">more</a>
V666 — Case	998		

Vehicle Impact 2 C5		Not applicable	<a href="#">more</a>
V667 — Case Vehicle Impact 2 C6	998	Not applicable	<a href="#">more</a>
V668 — Case Vehicle Impact 2 +/- D	9998	—	—
V669 — Other Vehicle Reconstructed Impact Number	1	—	—
V670 — Other Vehicle Impact 1 Plane	9	Unknown	<a href="#">more</a>
V671 — Other Vehicle Impact 1 Direct Damage Length [DDL]	999	Unknown	<a href="#">more</a>
V672 — Other Vehicle Impact 1 Max Crush	999	Unknown	<a href="#">more</a>
V673 — Other Vehicle Impact 1 Field-L	999	Unknown	<a href="#">more</a>
V674 — Other Vehicle Impact 1 C1	999	Unknown	<a href="#">more</a>
V675 — Other Vehicle Impact 1 C2	999	Unknown	<a href="#">more</a>
V676 — Other Vehicle Impact 1 C3	999	Unknown	<a href="#">more</a>
V677 — Other Vehicle Impact 1 C4	999	Unknown	<a href="#">more</a>
V678 — Other Vehicle Impact 1 C5	999	Unknown	<a href="#">more</a>
V679 — Other	999		

Vehicle Impact 1 C6		Unknown	<a href="#">more</a>
V680 — Other Vehicle Impact 1 +/- D	0999 cm	—	—
V681 — Other Vehicle Reconstructed Impact Number	2	—	—
V682 — Other Vehicle Impact 2 Plane	8	Not applicable	<a href="#">more</a>
V683 — Other Vehicle Impact 2 Direct Damage Length [DDL]	998	Not applicable	<a href="#">more</a>
V684 — Other Vehicle Impact 2 Max Crush	998	Not applicable	<a href="#">more</a>
V685 — Other Vehicle Impact 2 Field-L	998	Not applicable	<a href="#">more</a>
V686 — Other Vehicle Impact 2 C1	998	Not applicable	<a href="#">more</a>
V687 — Other Vehicle Impact 2 C2	998	Not applicable	<a href="#">more</a>
V688 — Other Vehicle Impact 2 C3	998	Not applicable	<a href="#">more</a>
V689 — Other Vehicle Impact 2 C4	998	Not applicable	<a href="#">more</a>
V690 — Other Vehicle Impact 2 C5	998	Not applicable	<a href="#">more</a>
V691 — Other Vehicle Impact 2 C6	998	Not applicable	<a href="#">more</a>
V692 — Other	9998		

Vehicle Impact 2 +/- D		—	—
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## Case Vehicle Tires & Rims

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Variable Number and Name	Code Value	Code Description	Other Options
V701 — Left Front Wheel Damaged	1	Yes	<a href="#">more</a>
V702 — Right Front Wheel Damaged	1	Yes	<a href="#">more</a>
V703 — Right Rear Wheel Damaged	0	No	<a href="#">more</a>
V704 — Left Rear Wheel Damaged	0	No	<a href="#">more</a>
V705 — Left Front Tire Tread Type	4	All Weather	<a href="#">more</a>
V706 — Right Front Tire Tread Type	4	All Weather	<a href="#">more</a>
V707 — Right Rear Tire Tread Type	4	All Weather	<a href="#">more</a>
V708 — Left Rear Tire Tread Type	4	All Weather	<a href="#">more</a>
V709 — Left Front Carcass Construction	3	Radial	<a href="#">more</a>
V710 — Right Front Carcass Construction	3	Radial	<a href="#">more</a>
V711 — Right Rear Carcass Construction	3	Radial	<a href="#">more</a>
V712 — Left Rear Carcass Construction	3	Radial	<a href="#">more</a>
V717 — Left Front Tire Size	P195/65R15	—	—
V718 — Right Front Tire Size	P195/65R15	—	—
V719 — Right Rear Tire Size	P195/65R15	—	—
V720 — Left Rear Tire Size	P195/65R15	—	—

## Case Vehicle Fuel, Tank, Fire

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Variable Number and Name	Code Value	Code Description	Other Options
V801 — Propulsive Fuel Type	1	Gasoline	<a href="#">more</a>
V802 — Main Tank Location	322	Within frame/centered laterally -	<a href="#">more</a>



		within vertically	
V803 — Main Filler Cap Location	133	—	—
V804 — Main Tank Material	1	Steel	<a href="#">more</a>
V805 — Aux Tank Type	8	Not applicable (not equipped)	<a href="#">more</a>
V806 — Aux Tank Location	888	Not applicable (not equipped)	<a href="#">more</a>
V807 — Aux Filler Cap Location	888	Not applicable (not equipped)	<a href="#">more</a>
V808 — Aux Tank Material	8	Not applicable	<a href="#">more</a>
V901 — Fuel Leakage From Crash	0	No	<a href="#">more</a>
V1001 — Fire In Or On Case Vehicle	0	No	<a href="#">more</a>

## Case Vehicle Exterior

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Variable Number and Name	Code Value	Code Description	Other Options
V1101 — Hood Latch Released	0	No	<a href="#">more</a>
V1102 — Hood Latch Damaged	1	Yes	<a href="#">more</a>
V1103 — Hood Latch Jammed	1	Yes	<a href="#">more</a>
V1104 — Left Hood Hinge Damaged	1	Yes	<a href="#">more</a>
V1105 — Left Hood Hinge Separated	0	No	<a href="#">more</a>
V1106 — Right Hood Hinge Damaged	1	Yes	<a href="#">more</a>
V1107 — Right Hood Hinge Separated	0	No	<a href="#">more</a>
V1108 — Hood Remained On Vehicle	1	Yes	<a href="#">more</a>
V1109 — Rear Hood Edge Elevated	1	Yes	<a href="#">more</a>
V1110 — Edge Contacted Windshield	0	No	<a href="#">more</a>
V1111 — Edge Penetrated Windshield	8	Not applicable	<a href="#">more</a>
V1112 — Hood Latch Location	1	Front of Vehicle	<a href="#">more</a>
V1113 — Eng/Transmissn Mount Separation	0	No	<a href="#">more</a>
V1114 — Steerng Column Flex Coupling	9	Unknown if equipped	<a href="#">more</a>
V1115 — Steerng Column Coupling Damaged	9	Unknown	<a href="#">more</a>
V1116 — Steerng Column Coupling Separated	9	Unknown	<a href="#">more</a>
V1117 — Eng Comp Telescopng Unit	88	Not collected	<a href="#">more</a>
V1118 — Comp Orig/Telescopd Diff	888	Not collected	<a href="#">more</a>
V1119 — Left Side Body Mount Separation	8	Not applicable (unitized)	<a href="#">more</a>

V1120 — Upper Left A-pillar Separation	0	No	<a href="#">more</a>
V1121 — Lower Left A-pillar Separation	0	No	<a href="#">more</a>
V1122 — Upper Left B-pillar Separation	0	No	<a href="#">more</a>
V1123 — Lower Left B-pillar Separation	0	No	<a href="#">more</a>
V1124 — Upper Left C-pillar Separation	0	No	<a href="#">more</a>
V1125 — Lower Left C-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1126 — Upper Left D-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1127 — Lower Left D-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1128 — Left Front Door Opening Cause	0	Door did not open	<a href="#">more</a>
V1129 — Left Rear Door Opening Cause	8	Not applicable (no left rear door)	<a href="#">more</a>
V1130 — Left Front Door Jammed Closed	0	No	<a href="#">more</a>
V1131 — Left Rear Door Jammed Closed	8	Not applicable (no left rear door)	<a href="#">more</a>
V1132 — Rear Door Type	0	No door (includes pickups)	<a href="#">more</a>
V1133 — Rear Door Opening Cause	8	Not applicable (no rear door)	<a href="#">more</a>
V1134 — Rear Door Jammed Closed	8	Not applicable (no rear door)	<a href="#">more</a>
V1135 — Luggage Partition Damagd	0	No	<a href="#">more</a>
V1136 — Spare Tire Status	8	Not collected	<a href="#">more</a>
V1137 — Trailer Hitch Type	0	No hitch	<a href="#">more</a>
V1138 — Trailer Type	0	No trailer	<a href="#">more</a>
V1139 — Right Side Body Mount Separation	8	Not applicable (unitized)	<a href="#">more</a>
V1140 — Upper Right A-pillar Separation	4	No separation, but damaged	<a href="#">more</a>
V1141 — Lower Right A-pillar Separation	4	No separation, but damaged	<a href="#">more</a>
V1142 — Upper Right B-pillar Separation	4	No separation, but damaged	<a href="#">more</a>
V1143 — Lower Right B-pillar Separation	4	No separation, but damaged	<a href="#">more</a>
V1144 — Upper Right C-pillar	0	No	<a href="#">more</a>

Separation			
V1145 — Lower Right C-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1146 — Upper Right D-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1147 — Lower Right D-pillar Separation	8	Not applicable (not equipped)	<a href="#">more</a>
V1148 — Right Front Door Opening Cause	00	Door did not open	<a href="#">more</a>
V1149 — Right Rear Door Opening Cause	98	Not applicable (no right rear door)	<a href="#">more</a>
V1150 — Right Front Door Jammed Closed	1	Yes	<a href="#">more</a>
V1151 — Right Rear Door Jammed Closed	8	Not applicable (no right rear door)	<a href="#">more</a>
V1152 — Van Rear Door Type	8	Not applicable (not a van)	<a href="#">more</a>
V1153 — Windshield Cracked	 <a href="#">Click for windshield damage figure</a>	Yes	<a href="#">more</a>
V1154 — Windshield Broken	0	No	<a href="#">more</a>
V1155 — Windshield Cracked or Broken by Occupant	0	No	<a href="#">more</a>
V1156 — Bond Separation Extent	0	None	<a href="#">more</a>
V1157 — Windshield Code	 <a href="#">Click for windshield code figure</a>	—	—
V1158 — Did Sun/T Roof Open	1	Yes	<a href="#">more</a>

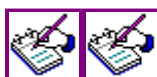
## Case Vehicle Steering Column/Rim

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Variable Number and Name	Code Value	Code Description	Other Options
V1201 — Steering Wheel Rim Damage	0	None	<a href="#">more</a>
V1202 — Number of Steering Wheel Spokes	4	4 spokes	<a href="#">more</a>

V1203 — Steering Wheel Spoke Damage	0	None	<a href="#">more</a>
V1204 — Column Tilt Feature	3	Middle	<a href="#">more</a>
V1205 — Column Swing-away Feature	0	Not equipped	<a href="#">more</a>
V1206 — Column Telescoping Feature	0	Not equipped	<a href="#">more</a>
V1207 — Wheel Energy Absorb Device	8	Not collected	<a href="#">more</a>
V1208 — Wheel Ea Orig/Damaged Diff	888	Not collected	<a href="#">more</a>
V1209 — Column Energy Absorb Device	88	Not collected	<a href="#">more</a>
V1210 — Column Ea Orig/Comprss Diff	888	Not collected	<a href="#">more</a>
V1211 — Shear Capsule Separation	888	Not collected	<a href="#">more</a>
V1212 — Column Vertical Rotation	0	No apparent rotation	<a href="#">more</a>
V1213 — Column Lateral Rotation	0	No apparent rotation	<a href="#">more</a>
V1214 — Steering Wheel Hub Damage	0	None	<a href="#">more</a>

## Case Vehicle Intrusion



Click for intrusion figures

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Variable Number and Name	Code Value	Code Description	Other Options
V1301 — Occupant Compartment Intrusion	1	Yes	<a href="#">more</a>
V1302 — Was Intrusion Catastrophic	0	No	<a href="#">more</a>
V1303 — Intrusion Number 01	01	Intrusion #1	<a href="#">more</a>
V1304 — Intrusion 01 Occupant Space Number	13	First row, Right seat	<a href="#">more</a>
V1305 — Intrusion 01 Intruding Object	08	A-pillar	<a href="#">more</a>
V1306 — Intrusion 01 Assoc Event Number	1	Event #1	<a href="#">more</a>
V1307 — Intrusion 01 Max Intrusion X-axis	10 cm	—	—
V1308 — Intrusion 01 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1309 — Intrusion 01 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>

V1310 — Intrusion 01 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1311 — Intrusion 01 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1312 — Intrusion 01 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1313 — Intrusion 01 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1314 — Intrusion Number 02	02	Intrusion #2	<a href="#">more</a>
V1315 — Intrusion 02 Occupant Space Number	13	First row, Right seat	<a href="#">more</a>
V1316 — Intrusion 02 Intruding Object	01	Instrument panel	<a href="#">more</a>
V1317 — Intrusion 02 Assoc Event Number	1	Event #1	<a href="#">more</a>
V1318 — Intrusion 02 Max Intrusion X-axis	10 cm	—	—
V1319 — Intrusion 02 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1320 — Intrusion 02 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1321 — Intrusion 02 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1322 — Intrusion 02 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1323 — Intrusion 02 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1324 — Intrusion 02 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1325 — Intrusion Number 03	03	Intrusion #3	<a href="#">more</a>
V1326 — Intrusion 03 Occupant Space Number	13	First row, Right seat	<a href="#">more</a>
V1327 — Intrusion 03 Intruding Object	03	Toe pan	<a href="#">more</a>
V1328 — Intrusion 03 Assoc Event Number	1	Event #1	<a href="#">more</a>
V1329 — Intrusion 03 Max Intrusion X-axis	07 cm	—	—
V1330 — Intrusion 03 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1331 — Intrusion 03 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1332 — Intrusion 03 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1333 — Intrusion 03 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1334 — Intrusion 03 Occupant	00	No contact or no intrusion	<a href="#">more</a>

Number			
V1335 — Intrusion 03 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1336 — Intrusion Number 04	04	Intrusion #4	<a href="#">more</a>
V1337 — Intrusion 04 Occupant Space Number	13	First row, Right seat	<a href="#">more</a>
V1338 — Intrusion 04 Intruding Object	30	Sill	<a href="#">more</a>
V1339 — Intrusion 04 Assoc Event Number	1	Event #1	<a href="#">more</a>
V1340 — Intrusion 04 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1341 — Intrusion 04 Max Intrusion Y-axis	06 cm	—	—
V1342 — Intrusion 04 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1343 — Intrusion 04 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1344 — Intrusion 04 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1345 — Intrusion 04 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1346 — Intrusion 04 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1347 — Intrusion Number 05	00	No Intrusion, None	<a href="#">more</a>
V1348 — Intrusion 05 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1349 — Intrusion 05 Intruding Object	00	No Intrusion, None	<a href="#">more</a>
V1350 — Intrusion 05 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>
V1351 — Intrusion 05 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1352 — Intrusion 05 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1353 — Intrusion 05 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1354 — Intrusion 05 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1355 — Intrusion 05 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1356 — Intrusion 05 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1357 — Intrusion 05 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1358 — Intrusion Number 06	00	No Intrusion, None	<a href="#">more</a>

V1359 — Intrusion 06 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1360 — Intrusion 06 Intruding Object	00	No Intrusion, None	<a href="#">more</a>
V1361 — Intrusion 06 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>
V1362 — Intrusion 06 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1363 — Intrusion 06 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1364 — Intrusion 06 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1365 — Intrusion 06 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1366 — Intrusion 06 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1367 — Intrusion 06 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1368 — Intrusion 06 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1369 — Intrusion Number 07	00	No Intrusion, None	<a href="#">more</a>
V1370 — Intrusion 07 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1371 — Intrusion 07 Intruding Object	00	No Intrusion, None	<a href="#">more</a>
V1372 — Intrusion 07 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>
V1373 — Intrusion 07 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1374 — Intrusion 07 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1375 — Intrusion 07 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1376 — Intrusion 07 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1377 — Intrusion 07 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1378 — Intrusion 07 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1379 — Intrusion 07 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1380 — Intrusion Number 08	00	No Intrusion, None	<a href="#">more</a>
V1381 — Intrusion 08 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1382 — Intrusion 08 Intruding	00		

Object		No Intrusion, None	<a href="#">more</a>
V1383 — Intrusion 08 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>
V1384 — Intrusion 08 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1385 — Intrusion 08 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1386 — Intrusion 08 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1387 — Intrusion 08 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1388 — Intrusion 08 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1389 — Intrusion 08 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1390 — Intrusion 08 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1391 — Intrusion Number 09	00	No Intrusion, None	<a href="#">more</a>
V1392 — Intrusion 09 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1393 — Intrusion 09 Intruding Object	00	No Intrusion, None	<a href="#">more</a>
V1394 — Intrusion 09 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>
V1395 — Intrusion 09 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1396 — Intrusion 09 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1397 — Intrusion 09 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1398 — Intrusion 09 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1399 — Intrusion 09 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1400 — Intrusion 09 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1401 — Intrusion 09 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1402 — Intrusion Number 10	00	No Intrusion, None	<a href="#">more</a>
V1403 — Intrusion 10 Occupant Space Number	00	No Intrusion, None	<a href="#">more</a>
V1404 — Intrusion 10 Intruding Object	00	No Intrusion, None	<a href="#">more</a>
V1405 — Intrusion 10 Assoc Event Number	0	No Intrusion, None	<a href="#">more</a>

V1406 — Intrusion 10 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1407 — Intrusion 10 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1408 — Intrusion 10 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	<a href="#">more</a>
V1409 — Intrusion 10 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1410 — Intrusion 10 Injury Number	00	No injury or no intrusion	<a href="#">more</a>
V1411 — Intrusion 10 Occupant Number	00	No contact or no intrusion	<a href="#">more</a>
V1412 — Intrusion 10 Injury Number	99	Contact, injury unknown or data not collected	<a href="#">more</a>
V1413 — Door Intrusion Number 01	88	Not Applicable	<a href="#">more</a>
V1414 — Door Intrusion Number 01 Cause	8	Not applicable	<a href="#">more</a>
V1415 — Door Intrusion Number 02	88	Not Applicable	<a href="#">more</a>
V1416 — Door Intrusion Number 02 Cause	8	Not applicable	<a href="#">more</a>
V1417 — Door Intrusion Number 03	88	Not Applicable	<a href="#">more</a>
V1418 — Door Intrusion Number 03 Cause	8	Not applicable	<a href="#">more</a>
V1419 — Door Intrusion 01 Component	88	Not Applicable	<a href="#">more</a>
V1420 — Door Intrusion 01 Component Damaged 1	8	Not Applicable	<a href="#">more</a>
V1421 — Door Intrusion 01 Component Damaged 2	8	Not Applicable	<a href="#">more</a>
V1422 — Door Intrusion 02 Component	88	Not Applicable	<a href="#">more</a>
V1423 — Door Intrusion 02 Component Damaged 1	8	Not Applicable	<a href="#">more</a>
V1424 — Door Intrusion 02 Component Damaged 2	8	Not Applicable	<a href="#">more</a>
V1425 — Door Intrusion 03 Component	88	Not Applicable	<a href="#">more</a>
V1426 — Door Intrusion 03 Component Damaged 1	8	Not Applicable	<a href="#">more</a>
V1427 — Door Intrusion 03 Component Damaged 2	8	Not Applicable	<a href="#">more</a>
V1428 — Door Intrusion 04 Component	88	Not Applicable	<a href="#">more</a>
V1429 — Door Intrusion 04	8		

Component Damaged 1		Not Applicable	<a href="#">more</a>
V1430 — Door Intrusion 04 Component Damaged 2	8	Not Applicable	<a href="#">more</a>

**Case Vehicle  
Airbag(s)**



[Click for Driver airbag figure](#)



[Click for Passenger airbag  
figure](#)

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Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1501 — Driver Airbag Equipped	1	Yes	<a href="#">more</a>
V1502 — Driver Airbag Deployed	1	Yes	<a href="#">more</a>
V1503 — Driver Airbag Condition	0	No Damage	<a href="#">more</a>
V1504 — Passenger Airbag Equip	1	Yes	<a href="#">more</a>
V1505 — Passenger Airbag Deployed	1	Yes	<a href="#">more</a>
V1506 — Passenger Airbag Condition	0	No Damage	<a href="#">more</a>
V1507 — Steering Wheel Airbag Tether	0	No	<a href="#">more</a>
V1508 — Driver Airbag Marked By Contact	0	No	<a href="#">more</a>
V1509 — Passenger Airbag Tether	1	Yes	<a href="#">more</a>
V1510 — Passenger Airbag Marked By Contact	1	Yes	<a href="#">more</a>

**Case Vehicle  
Interior**

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Variable Number and Name	Code Value	Code Description	Other Options
V1601 — Left Front Door Damaged	0	No	<a href="#">more</a>
V1602 — Right Front Door Damaged	0	No	<a href="#">more</a>
V1603 — Left Front Hardware Damaged	0	No	<a href="#">more</a>
V1604 — Right Front Hardware Damaged	1	Yes	<a href="#">more</a>
V1605 — Left Front Armrest Damaged	0	No	<a href="#">more</a>
V1606 — Right Front Armrest Damaged	0	No	<a href="#">more</a>
	0		

V1607 — Left Front Glass Damaged		No	<a href="#">more</a>
V1608 — Right Front Glass Damaged	1	Yes	<a href="#">more</a>
V1609 — Left Rear Door Area Damaged	0	No	<a href="#">more</a>
V1610 — Right Rear Door Area Damaged	0	No	<a href="#">more</a>
V1611 — Left Rear Hardware Damaged	0	No	<a href="#">more</a>
V1612 — Right Rear Hardware Damaged	0	No	<a href="#">more</a>
V1613 — Left Rear Armrest Damaged	0	No	<a href="#">more</a>
V1614 — Right Rear Armrest Damaged	0	No	<a href="#">more</a>
V1615 — Left Rear Glass Damaged	0	No	<a href="#">more</a>
V1616 — Right Rear Glass Damaged	0	No	<a href="#">more</a>
V1617 — Left Roof Side Rail Damaged	0	No	<a href="#">more</a>
V1618 — Right Roof Side Rail Damaged	1	Yes	<a href="#">more</a>
V1619 — Left B-pillar Damaged	0	No	<a href="#">more</a>
V1620 — Right B-pillar Damaged	0	No	<a href="#">more</a>
V1621 — Left C-pillar Damaged	0	No	<a href="#">more</a>
V1622 — Right C-pillar Damaged	0	No	<a href="#">more</a>
V1623 — Left D-pillar Damaged	8	Not applicable	<a href="#">more</a>
V1624 — Right D-pillar Damaged	8	Not applicable	<a href="#">more</a>
V1625 — Left Headlining Damaged	0	No	<a href="#">more</a>
V1626 — Right Headlining Damaged	0	No	<a href="#">more</a>
V1627 — Left Roof Structure Damaged	0	No	<a href="#">more</a>
V1628 — Right Roof Structure Damaged	0	No	<a href="#">more</a>
V1629 — Left T/Sun Roof Damaged	0	No	<a href="#">more</a>
V1630 — Right T/Sun Roof Damaged	0	No	<a href="#">more</a>
V1631 — Other Left Side Item Damaged	8	Not applicable	<a href="#">more</a>
V1632 — Other Right Side Item Damaged	8	Not applicable	<a href="#">more</a>
V1633 — Foot Controls Damaged	0	No	<a href="#">more</a>
V1634 — Ignition Key Damaged	0	No	<a href="#">more</a>
V1635 — Rear View Mirror Damaged	1	Yes	<a href="#">more</a>

V1636 — Sunvisor/Fitting Damaged	0	No	<a href="#">more</a>
V1637 — Windshield Molding Damaged	0	No	<a href="#">more</a>
V1638 — Left A-pillar Damaged	0	No	<a href="#">more</a>
V1639 — Right A-pillar Damaged	1	Yes	<a href="#">more</a>
V1640 — Center Console Damaged	0	No	<a href="#">more</a>
V1641 — Transmission Lever Damaged	0	No	<a href="#">more</a>
V1642 — Horn/Spoke Shroud Damagd	0	No	<a href="#">more</a>
V1643 — Upper Panel Damaged	0	No	<a href="#">more</a>
V1644 — Mid Panel Damaged	1	Yes	<a href="#">more</a>
V1645 — Lower Panel Damaged	4	Yes, occupant contact	<a href="#">more</a>
V1646 — Ashtray Damaged	8	Not applicable	<a href="#">more</a>
V1647 — Control Knob/Lever Damaged	1	Yes	<a href="#">more</a>
V1648 — Glove Compartment Area Damaged	1	Yes	<a href="#">more</a>
V1649 — Instruments Damaged	0	No	<a href="#">more</a>
V1650 — Park Brake Release Damaged	0	No	<a href="#">more</a>
V1651 — Park Brake Pedal Damaged	8	Not applicable	<a href="#">more</a>
V1652 — A/C Or Upper Vent Damaged	0	No	<a href="#">more</a>
V1653 — Heater Or A/C Duct Damaged	0	No	<a href="#">more</a>
V1654 — Radio Damaged	0	No	<a href="#">more</a>
V1655 — Other Item Damaged	8	Not applicable	<a href="#">more</a>
V1656 — Rear Window Damaged	0	No	<a href="#">more</a>
V1657 — Rear Window Header Damaged	0	No	<a href="#">more</a>
V1658 — Vertical Console Damaged	4	Yes, occupant contact	<a href="#">more</a>
V1659 — Roof Console Damaged	8	Not applicable	<a href="#">more</a>

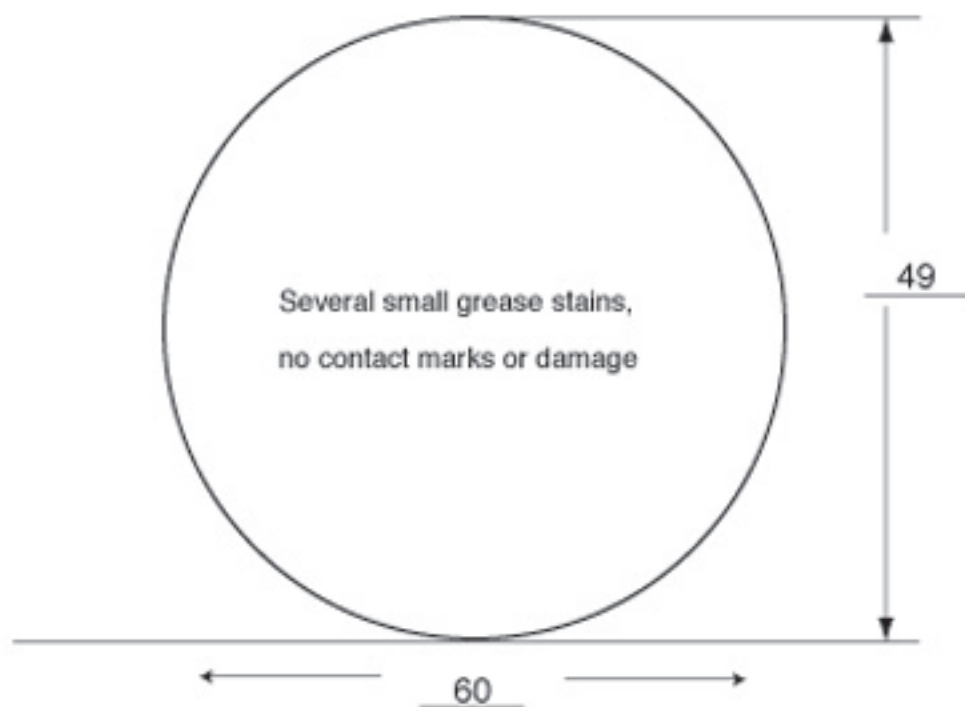
## Case Vehicle Seats

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Variable Number and Name	Code Value	Code Description	Other Options
V1701 — Driver Front Seat Type	05	Bucket	<a href="#">more</a>
V1702 — Passenger Front Seat Type	05	Bucket	<a href="#">more</a>

V1703 — Driver Seat Mount Type	1	Standard	<a href="#">more</a>
V1704 — Passenger Seat Mount Type	1	Standard	<a href="#">more</a>
V1705 — Driver Swivel Mechanism Equipped	0	No	<a href="#">more</a>
V1706 — Passenger Swivel Mechanism Equipped	0	No	<a href="#">more</a>
V1707 — Driver Seat Original Equipment	1	Yes	<a href="#">more</a>
V1708 — Passenger Seat Original Equipment	1	Yes	<a href="#">more</a>
V1709 — Driver Seat/Rear Occupant Contact	8	Not applicable	<a href="#">more</a>
V1710 — Passenger Seat/Rear Occupant Contact	8	Not applicable	<a href="#">more</a>
V1711 — Driver Seat Damage	0	None	<a href="#">more</a>
V1712 — Passenger Seat Damage	0	None	<a href="#">more</a>
V1713 — Center Front Armrest Damaged	0	No	<a href="#">more</a>
V1714 — Driver Seat Rotation	0	None apparent	<a href="#">more</a>
V1715 — Passenger Seat Rotation	0	None apparent	<a href="#">more</a>
V1716 — Driver Seat-back Type	3	Reclining	<a href="#">more</a>
V1717 — Passenger Seat-back Type	3	Reclining	<a href="#">more</a>
V1718 — Driver Seat-back Lock Type	1	Manual	<a href="#">more</a>

Driver Airbag



Vents: ☒ Y ☐ N

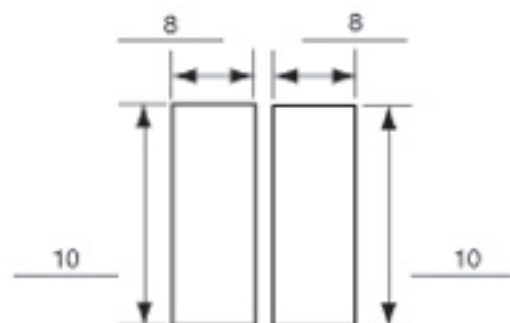
if yes, how many: 2

Vents @ 3 and 9 o'clock

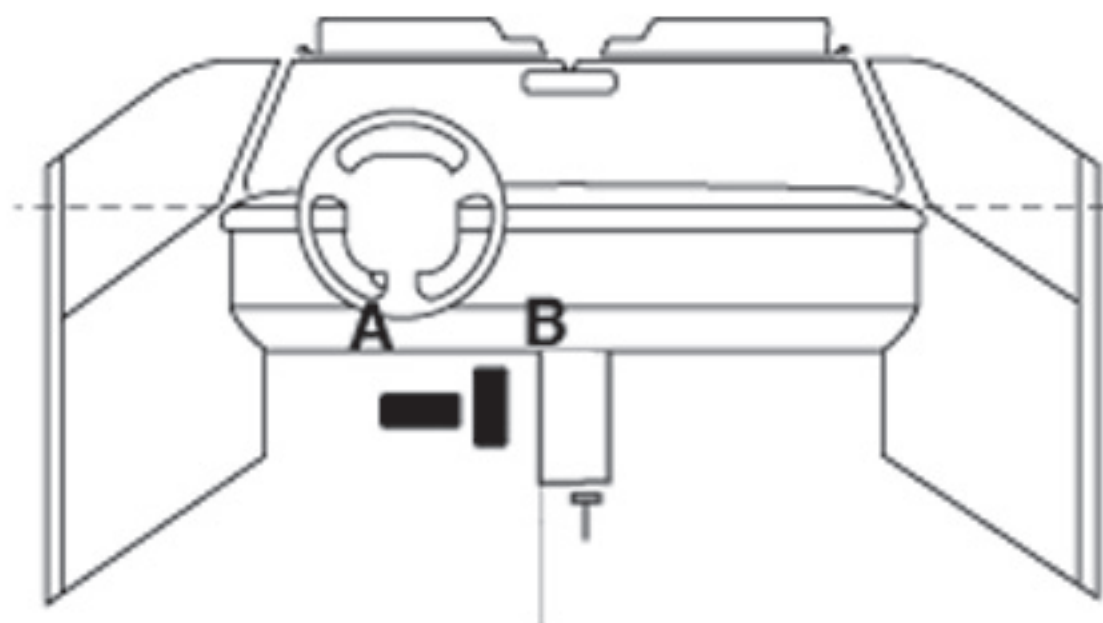
Tethers: Y ☒ N

if yes, how many:         

Driver Airbag Doors



I-Pattern



**A = Knee bolster, scuffmark**

**B = Vertical console, scuffmark**

1 = Definitely 2 = Probably 3 = Possible

## INTRUSION IT-1

Location of Intrusion	Intruded Component	(All Measurements Are in Centimeters)					Dominant Crush Direction
		Comparison Value	–	Intruded Value	=	Intrusion	
13	A-pillar	97	–	87	=	10	to rear
13	Instrument panel	80	–	70	=	10	to rear
13	Toepan	52	–	45	=	7	to rear
13	Door sill	67	–	61	=	6	to left
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

## OCCUPANT CONTACT WORKSHEET

Contact	Interior Component Contacted	Occupant No. if Known	Body Region if Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	Knee Bolster	1	Left Lx	Scuffmark	2
B	Vertical Console	1	Right Lx	Scuffmark	3
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					



WINDSHIELD MARK ON CASE VEHICLE:

SOFT-RAY

SAFETY  
AS-1



FLO-LITE  
28 2

LAMINATED

1

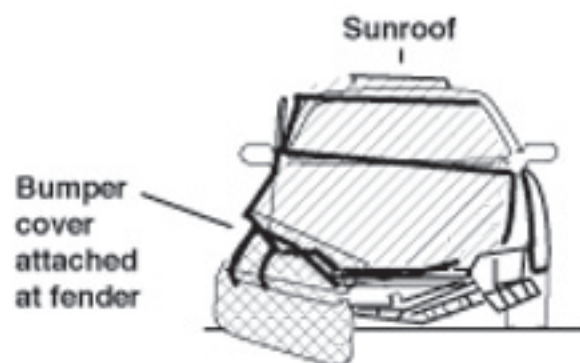
4

DOT 18

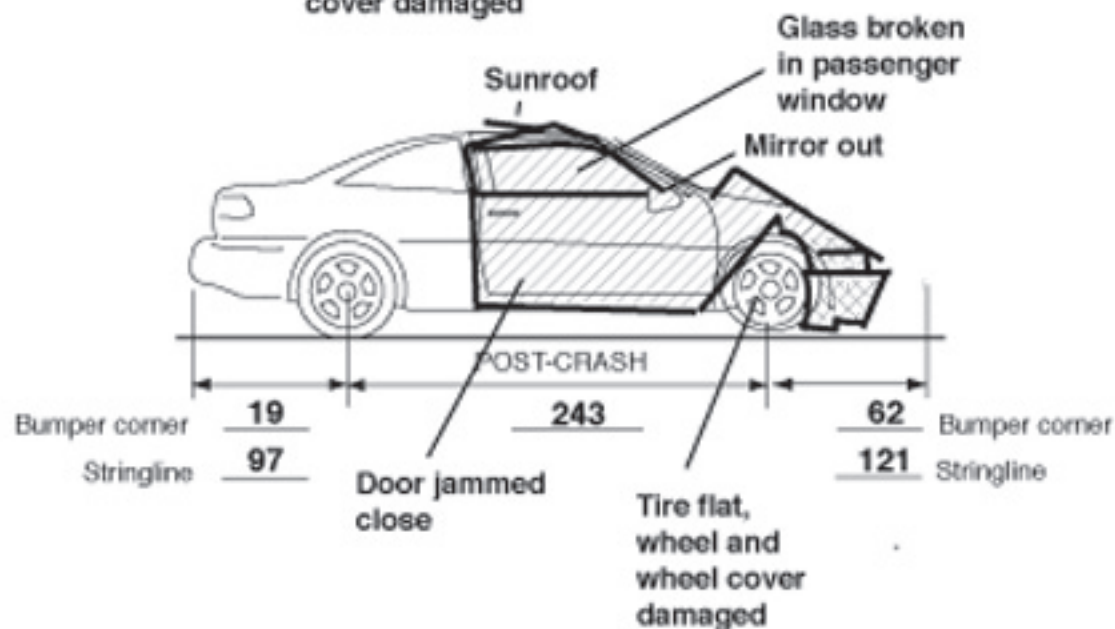
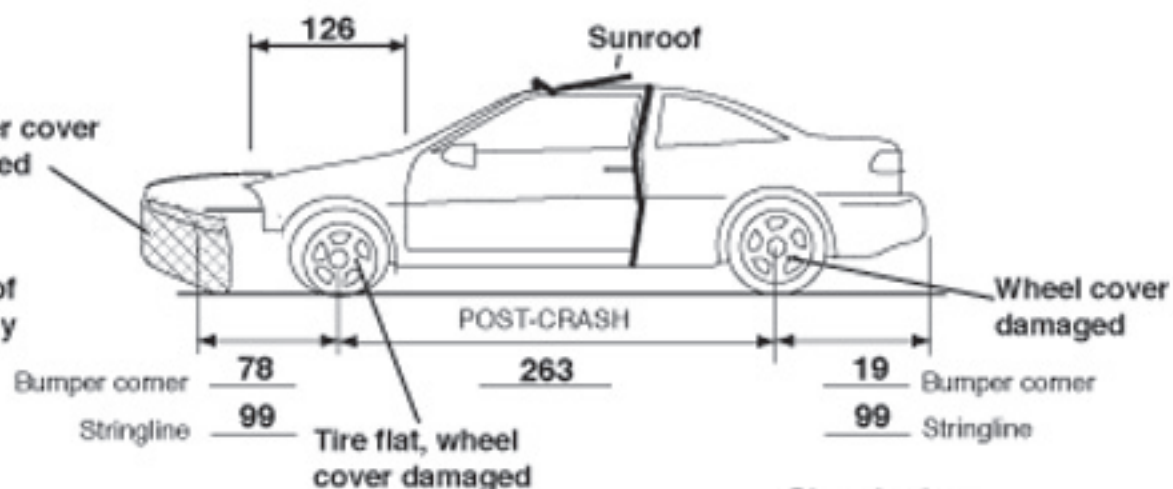
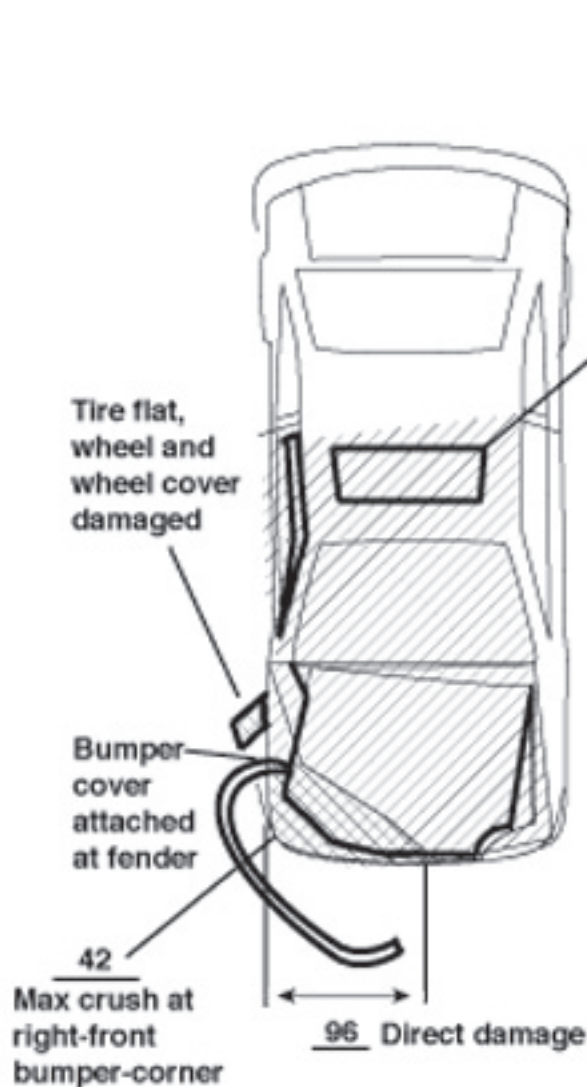
M405

COUPE

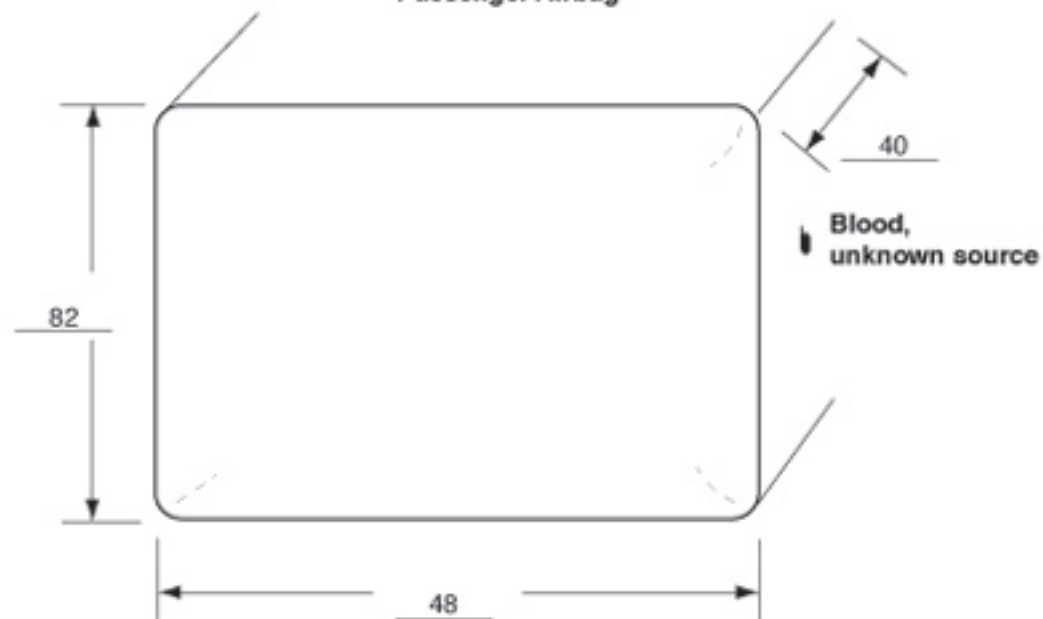
# MEASUREMENTS IN CENTIMETERS



No damage to rear of vehicle

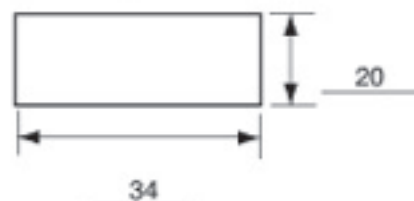


Passenger Airbag



Passenger Airbag Door

Single Door



Vents: Y ☒ N  
if yes, how many: \_\_\_\_\_

Tethers: ☒ Y N  
if yes, how many: 2









































































TPC SPEC 1103MS

P195/65R14D

LR









L.F.

TOURING

1





















































